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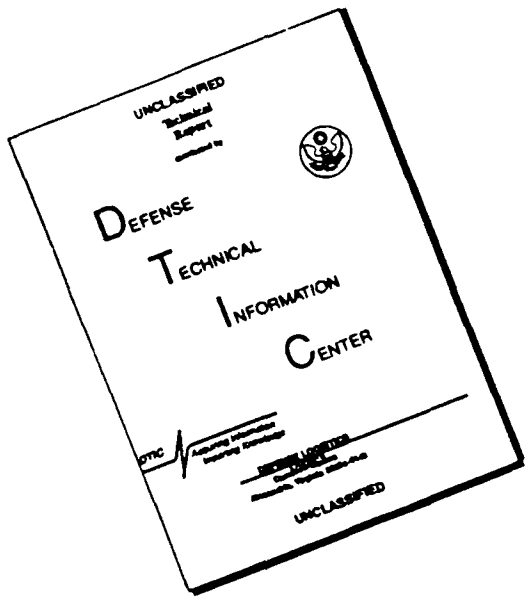

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ABSTRACT

Title of Seminar Paper: Nursing Cases Management: Adapting to the Challenges of Today's Healthcare Environment

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The nursing case management model of patient care delivery is examined throughout this paper. A historical perspective and key forces that led to its emergence on the healthcare scene are included. Two distinct models of nursing case management, including components and distinguishing features of each program are discussed as well as recommendations for their implementation. A study of both models of nursing case management shows unique strengths in each and the potential for broad applications. The relevance of nursing theory to the nursing case management concept is also explored.

Strategies for developing a nursing case management program are examined along with implications for nursing and the role of the clinical nurse specialist in developing and implementing such a program. Questions and implications for future research are also presented. The need for nursing to assume a proactive position and to adapt models of care and tools to meet the needs of today's dynamic healthcare environment is emphasized.

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Nursing Case Management: Adapting to the Challenges of Today's Healthcare Environment

by
Janice Collings

Seminar Paper submitted to the Faculty of the Graduate School of the University of Maryland at Baltimore in partial fulfillment of the requirements for the degree of Master of Science
May 1993

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Chapter one

Statement of the Problem

The spiraling cost of health care is a critical issue facing health care providers, third-party insurance payers and consumers. "Greater consumption of healthcare services has resulted in expenditures rising from six percent to twelve percent of the United States gross national product (GNP) over the past 25 years, with another five percent projected to occur during the 1990's" (Gruber Wood, Olsen Bailey & Tikemeier, 1992). Last year alone, national health expenditures rose almost ten percent, more than three times the overall rate of inflation. Recent figures show spending on healthcare between 1990 and 1992 jumped from twelve percent of the GNP's total spending on goods and services to nearly fourteen percent (Stout, 1993). This increase in healthcare spending has necessitated dramatic changes in the healthcare industry. Containing costs, while at the same time positively effecting patient outcomes through high quality care, is a goal that presents a unique challenge for all concerned.

With the movement toward prospective payment systems in the hospital sector, such as the Medicare approach based on diagnosis-related groups (DRGs), hospitals have additional incentives to control costs and allocate resources in the most efficient manner possible (Drummond, Stoddard, Labelle & Cushman, 1987). Healthcare executives are borrowing strategies from the business sector and applying business and economic principles to develop a bottom-line management orientation which focuses on the difference between the costs of providing services and the return received (Olivas, Del Togno-Armanasco, Erickson & Harter, 1989). However, financial constraints and incentives are not the sole factors responsible for recent healthcare change. Trends in technological advances, shifting patterns of illness, shortages of nurses, ethical dilemmas, competition and heightened consumer expectations have also impacted the organization and management of healthcare services (Petryshen & Petryshen, 1992).

It is clear that holding down the costs associated with healthcare is essential for the survival of our

healthcare system as well as the balance of the national economy. But providing cost-efficient healthcare is not enough, it must be demonstrated that patient care is effective and quality outcomes are being achieved as well. The evolution of "hi-tech" care into "hi-speed" care has resulted in a paradox which implies that cost-efficiency and quality care are goals which are mutually exclusive. To resolve this paradox, organizations are looking to restructure models of patient care delivery. Alternate care delivery models have the potential for eliminating the major barrier to quality care; the lack of understanding and the ability to control the care delivery process (Olivas, et. al., 1989).

While hospital administrators strive to control costs associated with delivering care, they lack the unique understanding of the care delivery process, that nurses possess. The nurse's insight into the care delivery process is essential for the successful implementation of a new care delivery model. Nurses are in a key position to redesign tools and roles that better fit the demands of today's environment and to

produce cost-effective accountability along with professional nurse satisfaction through the implementation of alternative care delivery models.

Purpose of the Paper

The purpose of this paper is to examine one innovative model of patient care delivery; nursing case management, and discuss relevant issues affecting the delivery of healthcare that led to its emergence and popularity within the healthcare arena. Various models of nursing case management will be presented along with strategies for developing and implementing a nursing case management program. Potential benefits of a case management approach and implications for nursing will also be discussed.

Background: The Emergence of Managed Care

By the late 1970's and early 1980's, competition and cost-containment had become critical issues in the healthcare industry in the United States. Healthcare providers, third party insurance payers, consumers, business organizations, as well as governmental agencies became obsessed with managing costs. In a rapidly changing healthcare economy, curtailing costs

had become essential for hospitals and physicians to ensure their market shares (Wolfson, Levin & Campbell, 1988).

One significant impetus for controlling costs was the advent of DRGs. Under this system, reimbursement for patient care was limited to specific length of stay parameters allotted for each case type. DRGs imposed a major limitation because they were developed based on a biomedical model. Principle diagnosis, secondary diagnosis, major procedure, discharge disposition and age are the primary factors affecting the DRG assignment. " Although complications and comorbidities were taken into account, the actual interventions and subsequent costs of getting the patient through the hospitalization were not outlined prior to the enactment of DRGs" (Zander, 1988). As a consequence, DRGs failed to describe the real work involved in caring for patients. This forced healthcare organizations to seek out new ways to curb the cost of providing care.

In response to fiscal constraints, health maintenance organizations (HMOs) and preferred provider

organizations (PPOs) began to proliferate. HMOs provide comprehensive healthcare services to members based on a fixed annual fee and PPOs offer financial incentives for choosing care from within a selected group of physicians. The principle advantage of these systems was purported to be lower healthcare costs as a result of reduced inpatient hospital care and a greater reliance upon primary care. One of the chief lynch pins of these programs was a medical and administrative gate-keeping system that modifies care utilization patterns by managing patient access to services (Ibid). Utilization review experts found that misuse of resources often occurs because patients lack knowledge about available resources and how to utilize them properly. Resource misutilization also results in diminished access to services because the emphasis continues to be on episodic, illness oriented care. Consequences from this orientation include:

1. Increased healthcare costs resulting from patients being hospitalized versus receiving less expensive home care alternatives.

2. Longer hospital stays resulting from patients

entering the hospital at higher levels of acuity than might have been expected if appropriate outpatient monitoring had been initiated. For example, earlier admission to a general unit may preclude admission to intensive care.

3. Increased complication and readmission rates resulting from unplanned and unmonitored hospital discharges of high-risk individuals (Ethridge & Lamb, 1989).

Despite the obvious benefits to be gained from focusing on preventative intervention, versus an illness orientation, there continues to be an overemphasis on the treatment of disease. In recent years, 95 percent of our nation's medical costs have been for care and technology; with only 5 percent for prevention (Hasan, 1992). HMOs and other managed care pioneers were quick to recognize the tremendous expense reductions that could be achieved through health promotion endeavors. Preventative care has become a cornerstone of these programs.

Another barrier to cost-effectiveness, in the patient care delivery process, has been lack of

understanding of how the process is controlled. "Under conventional indemnity systems, patients go to the doctor of their choice and the insurer picks up the tab for an almost unrestricted range and frequency of services" (Smart, 1992, p. 67). There has been little incentive for physicians to hold costs down because since physicians direct services, they ultimately control the costs. In many instances, physicians have been rewarded for over-treating patients because they were paid for each procedure performed.

Clearly, efficient, well planned testing is a key element in cost-containment. New developments in technology have made an incredible array of tests available to physicians. Under managed care systems, medical directors may perform gate-keeping functions by overseeing the practice patterns of physicians. In this way, managed care has eliminated the "blank check" for testing. Requests for multiple tests are reviewed and physicians may be required to justify decisions for an entire battery of tests when one or two tests would provide equivalent results (Hasan, 1992).

Historically, the goals of managed care

initiatives have been to coordinate services, provide access to resources and services and coordinate and monitor healthcare practices. However many managed care systems have essentially provided "brokerage" of services. Most managed care programs have focused on large groups of individuals and target populations in out-of hospital situations (Etheredge, 1989). The role of the nurse in such programs has been limited, primarily, to a utilization review function.

Significance for Nursing

Nurses have the potential to tremendously impact the cost-effective delivery of patient care. The power of nurses to influence patient outcomes should not be underestimated. Together with physicians, nurses allocate as much as 80 percent of a hospital's resources in a production process that results in specific outcomes. Understanding and redesigning that process is the key to resolving the cost/quality dilemma and to enhancing nursing satisfaction and professional growth.

The present system of nursing care delivery is based on traditional industrial models. Thus, current

modes of delivering nursing care have not been able to keep pace with the rapidly changing healthcare environment. As a result, managed care has evolved within the acute care setting, placing emphasis on managing the patient's environment through coordination and monitoring of the appropriate use of patient care resources (Cohen, 1991). Managed care forms the basis for case management. Although managed care and case management share common goals and characteristics, each uses a somewhat different approach. The focus of managed care is the organization of unit-based care. The term unit refers to the geographical area in which the patient receives care. A unit may include an inpatient unit, and emergency department or an ambulatory care unit. As in managed care, the nursing case management model seeks to reduce costs and fragmentation associated with patient care by establishing a mechanism for the control and integration of services. In case management, the focus of change is the nurse's role (Etheredge, 1989). Another distinction is that, in case management, the nurse's responsibility extends beyond the geographical

unit, in which the patient receives care, to encompass the patient's entire episode of illness. Having accountability for the outcome of care throughout the entire course of a patient's illness provides nurse case managers with a unique role within nursing. Being accountable for the complete episode of care is what distinguishes case management from other nursing care modalities in which accountability is limited to the outcomes within a given shift or unit (Etheredge, 1989).

To achieve defined patient outcomes and reconcile criteria set from both diagnosis and reimbursement perspectives, the nurse case manager negotiates protocols through collaboration with other departments (LeClair, 1991). Clinical and financial outcomes that correspond to DRG allotted length of stays are thereby achieved. Continuity across the continuum of health care services from purely preventive, educational services, to tertiary care is also assured (Faherty, 1990).

The case management model was pioneered at the New England Medical Center in Boston in 1980. Since that

time this system has gained prominence in diverse community and acute care settings throughout Canada and the United States (Petryshen & Petryshen, 1992). Some advocates suggest that the day is near when all care givers will need to be prepared to function within the case management framework or within a variation of this model (Dunston, 1990).

The increasing popularity of case management has given rise to a proliferation of definitions and models of case management.

Definitions:

" A system of health assessment, planning, service procurement/delivery/coordination, monitoring to meet multiple service needs of clients>" (American Nurses Association, 1988).

" A problem solving system designed to ensure continuity of services and overcome system's rigidity, fragmentation and misutilization of service." (Cosgrove, UpJohn Healthcare Service, 1987).

" A matrix model at the clinician-provider level in acute care for the achievement of clinical and financial outcomes within predetermined timeframes,

accomplished by the care giver as case manager, working in an RN-MD collaborative practice and giving the patients and families more participation, security and satisfaction from the health care delivery system." (New England Medical Center, 1988).

" A system under which responsibility for locating, coordinating and monitoring a group of services rests with a defined person or group>" Section 2176 Omnibus Budget Reconciliation Act (PL7970-35).

" A multidisciplinary care process method which aims, by case-type, to achieve a purposeful and controlled connection between the quality of care and the cost of that care by:

1. Standardizing appropriate use of resources (services and treatments) within an appropriate length of stay and directed toward identified patient care, care giver and system outcomes.
2. Promoting collaborative team practice among disciplines.
3. Promoting coordinated continuity of care over the course of an illness while involving the patient/family

with the care process.

4. Promoting job satisfaction and job enrichment for care givers, and patient and physician satisfaction with care delivery and minimization of costs." (Del Togno-Armanasco, Olivas & Harter, 1989).

Despite the variety of definitions, all models of case management share common elements:

- A systemic approach for the coordination of services resource allocation.
- Cost-saving financial ramifications.
- Measurable outcomes.
- A responsible person or team.

The objectives of the case management system include:

- Quality care within a time frame through the attainment of expected clinical outcomes. Quality through continuity.
- Decreased fragmentation through the promotion of collaborative practice, coordinated care and continuity of care.
- Cost containment through the appropriate/reduced utilization of resources, and early discharge or discharge within length of stay parameters.

- Increased satisfaction for both professional staff and patients resulting in enhanced recruitment and retention of personnel and improved patient compliance with treatment regimens (Bastnagel Mason, 1992), Zander, 1988).

The components of the nursing case management model include mechanisms for:

- Planning care for specific patient populations.
- Delivering care within specified time frames.
- Identifying and correcting variations from the expected plan of care.
- Evaluating care of delivery in terms of patient outcomes (Strong, 1990).

Chapter Summary

This chapter discussed the problem of rising healthcare costs and the impact of these increased expenditures on the delivery of healthcare in the United States. The examination of the nursing case management model of patient care delivery was identified as the purpose of this paper. The background and evolution of the managed care concept

was presented along with the significance of the nursing case management model to nursing. Definitions of terms used were included in this chapter.

The next chapter will explore the literature as it relates to models of NCM. The primary focus of this chapter will be the discussion and comparison of two contrasting models of NCM; the New England Medical Center nursing NCM model and the Carondelet St. Mary's NCM model. The tools of NCM and considerations and recommendations for the implementation of a NCM system will also be presented.

Chapter II

Review of Literature

The literature identifies seven nursing case management models which are distinct in basic condeptualization and application (Williams, 1991; Michaels, 1992). All but one model, the American Nurses Association (ANA) model, have the acute care setting as a part of their model. the ANA model contends to be appropriate for all settings. The models identified include: ANA model; client-centered model of case management and triage model of case management; professional nursing network model; Yale New Haven nursing practice model; Peplau case management model, Carondelet St. Marys nursing case management model and the New England Medical Center nursing case management model (Williams, 1991; Michaels 1992). For the puposes of this paper, the focus will be on two models of nursing case management: the New England Medical Center (NEMC) nursing case management model and the Carondelet St. Mary's nursing case management model. These models will be discussed and contrasted.

The NEMC hospitals are considered pioneers in nursing case management, their model includes four components. The first component consists of two tools: the case management plan and the critical pathway which are designed to map, track, evaluate and adjust the patient's hospital course. The NEMC case management plans (CMPs) are detailed plans which reflect clinical problems that patients and families are likely to encounter, along with interventions aimed at resolving these problems (Giuliano & Poirier, 1991). The CMP is a design tool used to standardize care delivery for each DRG case type and identify the care interventions and goals of all care disciplines involved with the care (Del Togno-Armanasco et al., 1989). The case management plan promotes standardization of resource use. This is accomplished through service volume management which controls costs by decreasing the variation in the use of resources.

The NEMC case management plan is comprised of three central features: critical pathways, shift report and variance analysis with case consultation (Zander, 1988). The critical pathway is a day-by-day

guideline that ensures that interventions, treatments, diagnostic testing, consultations and patient education occur at the appropriate stage in the patient's recovery (Strong, 1990). Even in patients with multiple problems, such as a patient with chronic obstructive pulmonary disease and diabetes, the critical pathway relevant to the principle reason for admission is followed. The critical pathway is reviewed at the time of the patient's admission by the nurse case manager and physician to ensure its appropriateness for that patient and to make necessary revisions. The NEMC NCM model specifies that patients should have one critical pathway for their entire hospitalization unless their pathway drastically changes. Zander (1988) stresses that it is important to note that critical pathways are designed to be guidelines and not standing order sheets.

In conjunction with the use of the critical pathway, the shift report comprises the second feature of the NEMC case management plan. The change of shift report is expected to cue the next care provider into the purpose and goals of the next eight, ten or twelve

hours in the context of each patient's length of stay and expected outcomes. The shift report should include: the patient's name, diagnosis, anticipated length of stay, DRG case type, patient day number (i.e. day two of a five day hospitalization) and the patient's current status and critical activities, identified on the critical pathway, expected for that day. NEMC NCMs evaluate compliance with critical pathways and initiate appropriate consultations for problems causing deviations from the critical pathways. In some institutuons the critical pathway is used as the primary nursing documentation tool (Mosher, Cronk, Kidd, McCormick, Stockton & Sulla, 1992).

The third feature of the NEMC case management plan is called variance analysis and case consultation. The critical pathway is used by the caregiver to note the average course for patients in that case type and analyze the causes of positive and negative variances using a nursing knowledge base and knowledge of the patient. The staff uses problem solving strategies to better understand the reason for the variance and/or to help the next caregiver determine an approach to get

the patient back on track (Zander, 1988). Zander (1992) suggests requiring an automatic case consultation when patients are "at variance" for 24-48 hours.

Some institutions record variances on the reverse side of the critical pathways. Variances may be routed to the quality improvement coordinator for review and trending. Zander (1992) stresses the importance of recording significant information regarding the patient's status in the permanent progress notes, particularly if the critical pathway is not a permanent part of the patient record. Data from documentation of variances from the critical pathways provides the NCM the opportunity to track the deviations and explore their causes, identify trends and point the direction for altering the working environment, networks of collaboration and practice patterns as necessary to reduce or avoid excessive lengths of stay.

In the NEMC NCM model, the second major component is the nurse case manager. As in most NCM models, the NEMC nurse case manager is expected to be a skilled clinical manager who is committed to both the patient

and the institution (Giuliano & Poirer, 1991). The NEMC NCM model presumes a primary nursing care delivery system, based on the belief that the continuity, accountability and patient/nurse bonding inherent in this system are cornerstones to the success of the case management model. In the NEMC NCM model, all nurses give direct care as the patient's primary or associate nurse during the time the patient is on their unit, but one of the nurses is designated to be the case manager. Like the physician, the NCM has authority extending across all units for the duration of the episode of care (Zander, 1988). Nurse case managers are responsible for developing care for the caseloads assigned them. They are accountable for ensuring that resources are utilized appropriately, standards of care are maintained and outcomes are met to assure discharge within established length of stay parameters.

The third component of the NEMC model is ad hoc group practices. The practice group transcends unit affiliations and brings the nurse manager together with primary nurses, representatives from agencies that will provide follow-up care and key physicians for specific

case types (Zander, 1988). Perhaps the most critical relationship in planning the patient's care is the relationship between the physician and nurse. Physicians and nurses have always worked interdependently, but along parallel paths rather than in formal collaborative practice with written protocols. The contributions of nursing to clinical outcomes through interventions based on a diagnostic reasoning process and through "working the system" for both patients and physicians is an important consideration. Because of nursing's 24-hour access, a significant protion of a hospital's resources are allocated to nursing. Therefore, many potentially controllable costs of an episode of care are in the nursing realm of self-care deficits and physical complications which can frequently be prevented through astute nursing management (Zander, 1988).

The fourth component of the NEMC model is active patient and family participation. At the time of admission, the physician and nurse case manager discuss, with the patient and his family, the sequence of events, patient progress and outcomes the patient

can reasonably expect based on the patient's status and capabilities (Guiliano & Poirer, 1991).

The Carondelet NCM model shares many of the same goals and concepts with the NEMC NCM model, but is designed for team nursing versus NEMC's primary nursing practice pattern. Another distinction is that NEMC's model emphasizes strategic planning whereas the Carondelet model views their nursing case management enterprise as being based on a vision encompassing the broader value of health (Michaels, 1992). This underlying philosophy is the key factor that distinguishes the Carondelet NCM model from most other NCM models.

The foundation of nursing enterprise at Carondelet St. Mary's Hospital is built from their professional practice model. This progressive organization implemented shared governance in the early 1960s and was among the first to institute placing registered nurses on salary and to begin billing patients for hospital nursing services in 1985. In addition, staff nurses at Carondelet designed and maintain the credentialing process used to place and promote nurses

within their clinical ladder (Michaels, 1992).

Based on the belief that nurses could expand their impact on patients' recovery from illness, the nursing department at Carondelet adopted a nursing case management system. Carondelet NCMs are responsible and accountable for the overall plan of nursing care of clients on a continuing basis across a broad spectrum of care settings: in the hospital, the home and other community health centers (Newman, 1990). In the NEMC NCM model, the responsibilities of the case manager are limited primarily to the immediate period surrounding hospitalization (Zander, 1988). The focus of the NEMC model is on expeditious management of medical practice within healthcare whereas the Carondelet model embraces a more holistic view of the patient's changing and ongoing needs.

In contrast to NEMC's primary nursing system, the Carondelet model is based on a trilevel team nursing practice model. A masters-prepared nursing clinician relates directly to clients in a consulting as well as service role. This nurse collaborates with the client for total health assessment and long term planning but

generally has little involvement in the hands-on care of the client. The nurse clinician also collaborates with the other health professionals to facilitate access to needed resources. A baccalaureate-prepared nurse is designated as a team leader to provide clinical leadership of the nursing staff and translate prescribed medical and nursing care into an individualized client-centered plan of care. The Carondelet model uses a care plan versus a care map and critical pathway. The third member of the nursing team is the associate degree staff nursse. The staff nurse is responsible for implementing the delegated nursing care and for communicating observations regarding the client's condition and effectiveness of care (Newman, 1990).

The review of literature offers other examples of successful NCM systems utilizing team nursing (Lulavage, 1991; Cohen, 1991). However, there are also examples of team nursing NCM systems cited in the literature that were not effective (Biller, 1992). Problems may relate more to lack of adequate preparation and organizational support than to the

system of nursing practice.

Patients served by NCMs in both the NEMC and Carondelet models include individuals at high risk. The NEMC model is based on DRG assignment, whereas the Carondelet model emphasizes those who are at highest risk for managing their own health. The Carondelet model has defined four categories of people who can most benefit from a NCM "partnership": people who are cognitively and/or emotionally challenged, have insufficient family support, and have a high probability for sudden physiologic imbalance. The Carondelet NCM model relies on the network of nurses in complementary roles within St. Mary's Hospital, Health Center and Carondelet Corporate System which includes home health, hospice, nursing home and community health center care. They have found the greatest benefit to be that NCMs have influenced people's access to physician and hospital services resulting in intervention at a lower severity of illness. Currently most of the Carondelet NCM's work occurs in the community. Carondelet has recently initiated contracting NCM and community nursing services to a

medical HMO in an effort to provide additional services to the HMO and to emphasize nursing's contribution to health maintenance (Michaels, 1992).

Both systems of NCM have clearly demonstrated that the application of business and management concepts to help prescribe and predict client outcomes can result in fiscal rewards for the organization and expanded roles for nurses. However the reliance upon management theories and models, though necessary, is considered by some to place the entire nursing discipline at risk (Williams, 1991). The literature provides many descriptions of different NCM model designs, structures, implementation and outcomes, but there is little information regarding the relationship of nursing theory to NCM (Williams, 1991). Concepts shared among the various models are generally consistent and the metaparadigm commonly accepted by the nursing profession which includes nursing, person, environment and health is implied, but few of the NCM models specify a relationship to nursing conceptual models.

The Peplau case management model is one of the few

NCM models that does explictly incorporate theoretical relationships between NCM and the developmental nursing model (Williams, 1991). The literature also identifies Orem and Carpenito as theorists whose concepts are useful in case management nursing, but the relationship between the conceptual modesl and NCM is not specified (Ibid). Systems models including the frameworks of Roy, Johnson, King and Newman, which focus on the existance of biological, psychological and social systems within the person have been applied to develop nursing interventions to deal with imbalances within or between patients' functional systems. Interactionist nursing models such as those of Orlando, Travelbee, Reihl, Duldt and Giffin, identify the need for nursing intervention when it is perceived that the patient's role performance is not conducive to health. Nursing interventions are targeted at helping clients acquire roles that will effectively achieve their coping with their health concern (Ibid). Although these conceptual models have relevance for structuring nursing practice within a NCM model, none of them were identified in the literature as being implemented to guide the

development of NCM models.

The Carondelet NCM model was not based on a conceptual model, but Newman (1992) has examined the relevance of her theory of health and nurse-client relationships to nursing practice at Carondelet St. Mary's Hospital. Newman found the dimensions of the nurse-client relationships described by the NCMs paralleled the characteristics of nursing and the nurse client relationship described in her theory of health as expanding consciousness:

1. the nurse coming together with clients at critical choice points in their lives and participating with them in the process of expanding consciousness;
2. rhythmicity and timing in the relationship;
3. letting go of the need to direct the relationship;
4. pattern identification as an essential element in the process and
5. personal transformation

Despite the lack of an intentional application of her theory, Newman describes the practice of the Carondelet NCMs as a manifestation of her theory (Newman, 1992).

Many proponents of conceptual models feel that

efforts to increase the relevancy and boundaries of nursing theory to encompass concepts of the greater health delivery system are necessary to promote change and open new opportunities in nursing practice. On a more pragmatic level, the linking of theory and practice represents the first step in the definition and documentation of nursing practice necessary to fulfill third party insurance payer requirements. The recognition that nursing care emanates from a different paradigm than medical care is central to successfully pursue reimbursement for nursing services. The Carondelet St. Mary's Hospital experience attests to the benefits of billing for nursing services in both financial rewards and in nursing satisfaction.

With few exceptions (Biller, 1992), NCM models have been shown to facilitate outcome-oriented, cost-effective care. Clearly a business orientation can complement, rather than detract from the human caring aspects of nursing. As illustrated by the NEMC and Carondelet examples, managed care concepts can be adapted for use in a variety of settings. For purposes of this paper, recommendations for the implementation

of NCM will relate primarily to an acute care setting.

Implementation

The key to the successful implementation of a case management model is the role of the case manager. The selection of nurses as case managers is an important consideration in the implementation of case management. When baccalaureate-prepared case managers were used in some settings, they felt ill-prepared to make change at the systems level and they were unable to effectively coordinate services while also delivering patient care (Sparacino, 1990). Other settings have used the case manager to manage care instead of a caseload; the case manager supervises members of the nursing staff as opposed to providing direct patient care (Putney, Hauner, Hall & Kobb, 1990).

Ideally the case manager should be an advanced practice clinician in a full-time salaried position that allows flexibility in hours to facilitate all necessary patient or family interactions. The case manager should be able to receive reports on patients, make rounds with other disciplines, consult with

primary nurses and evaluate patient's adherence to critical pathways (Marina Biller, 1992). Without adequate preparation and commitment of the organization's leadership and the provision of qualified human resources and systems support, case managers may wish to abandon the role due to unrelieved frustration and subsequent burnout (Marina Biller, 1992; Zander, 1990).

In implementing case management, most systems use existing nursing staff. True case management usually involves some role restructuring. In some settings, nursing case management is seen as a natural evolution of primary nursing. Other facilities utilize advanced practice nurses such as clinical nurse specialists as case managers. In most models of managed care, the process begins prior to the patient's admission to the hospital. The NCM contacts the patient by phone or at the preadmission screening to explain the case management concept, patient expectations and anticipated progression of care. The NCM also answers patient questions.

During the patient's hospitalization, the NCM may

or may not be directly involved in hands-on patient care, but is responsible for the monitoring of daily care and the patient's progression according to the critical pathway or care plan. When different consultants are involved with a case, the NCM observes for conflicting or redundant orders. When procedures deviate from the critical pathway or expected outcomes, the NCM is responsible for notifying the attending physician, understanding why the deviations occurred and ensuring proper documentation. The NCM also coordinates patient discharge needs. Many needs are identified on admission, but this assessment is most successful when the patient is not admitted in a critical state. The discharge planning team should meet regularly, particularly as patients near discharge, to plan for home care needs.

The development of critical pathways is one of the first steps in implementing most models of case management. Critical pathways are developed by an interdisciplinary team and are generally based on analysis of DRGs and institutional practice patterns. Some institutions have made extensive preparations

prior to developing critical pathways. High volume DRG case types may be analyzed for reimbursement, cost and contribution margins using historical clinical and financial data. This data is compared with data from other hospitals to determine the potential economic benefits to be derived from a case management approach.

Reviewing data from pharmacy and physician utilization reports may reveal whether more standardized use of resources is indicated. Questions to consider include: Are any physician's lab charges significantly greater than the hospital average? Are average lab charges significantly greater than those of similar hospitals? Evaluation of the number and type of diagnostic tests performed may reveal the existence of test duplication or that unnecessary tests are being performed (McKenzie, Torkelson & Holt, 1989).

If standardized order sheets are used, these should be reviewed along with appropriate nursing and medical standards of care. An extensive literature review of practice patterns relating to the patient population, for whom the critical pathway is intended, may also be performed. Chart audits of specific

patient DRG case types, to determine prevalent practice patterns and trends, may also be useful. Zander (1988) suggests evaluating practice patterns by answering questions relating to the business of acute care:

- What are the high volume case types?
- What is the average length of stay for these patients?
- What are the usual patient problems (nursing diagnoses) related to specific case types or their subsets?
- What are the realistic clinical outcomes attainable (75- 100% of the time) at the end of the entire episode of care related to each problem?
- What are the intermediate outcomes (benchmarks)?
- What tasks do physicians and nurses do to get an "average" patient to the intermediate outcomes?

After analyzing clinical and financial data for specific case types, committee members begin the process of developing a critical pathway that will describe 75 percent of the patients within that case type. Although extensive preparation may be helpful before initiating critical pathway discussions, this is

not necessary for the successful development of an initial draft (Zander, 1992). Members of the interdisciplinary committee with extensive knowledge and clinical expertise relating to a specific case tlype will generally be able to identify appropriate interventions and benchmarks needed to achieve the desired patient outcomes within specific time frames. Zander (1992) suggests that a one to two hour discussion with a facilitator can usually produce a good critical pathway draft to be completed and tired on actual patients. The work of the interdisciplinary committee may be facilitated with the use of a computer with a viewer that projects the computer screen data onto a wall screen.

Special Considerations

Case management is not indicated for every patient or DRG case type. Attention should be focused on developing case management plans for those patients that stand to benefit the most from the managed care approach. Consideration should also be given to the organization of the unit and the patient care givers prior to intiating trial case management plans.

Physician involvement is another factor that influences successful nursing case management. Physicians may be supportive of the need to review and change practice patterns or they may respond negatively, viewing nursing case management as an intrusion into their business. Involving physicians in the planning and implementation phases of managed care will help to overcome their resistance.

The literature reports that physicians have noted positive outcomes as a result of using a managed care approach. Critical pathways may be tailored to reflect individual physician preferences. Patients are also more likely to receive the care desired regardless of the unit or which member of the nursing staff is providing the care when a critical pathway is employed. The need for calls from insurance utilization review and other departments is reduced. Furthermore, critical pathways provide reliable variance data; this data may be used to structure research questions (Zander, 1992).

With adequate preparation and appropriate application of concepts, the implementation of a NCM

model can yield very positive results. In developing a NCM approach, consideration should be given to organizational goals and objectives as well as the present system of care and the process by which it is being delivered. Incorporating the philosophy of nursing and the organization's values and culture in linking NCM objectives with a theoretical framework will also enhance practice within a NCM model. Finally, involving the entire organization in the planning and preparation aspects of the NCM process will foster committment to the program and help to ensure its success.

Chapter Summary

This chapter explored the literature relating to NCM. Two distinct models of NCM, the New England Medical Center model of NCM and the Carondelet St. Mary's NCM model were discussed and contrasted. Key components and unique features of both models were presented with reference to pertinent literature. The relationship of nursing theory and conceptural models to NCM was introduced and explored. Recommendations

and special considerations relating to the implementation of NCM were included.

The next chapter will address the nursing implications of nursing case management. The role of the clinical nurse specialist and implications relating to each dimension of the clinical nurse specialist role to include: clinical, consultant, educational, research and administrative applications will be presented. Relevant research questions will also be discussed.

Chapter III

Nursing Implications

The literature speaks extensively to the cost-savings benefits to be gained by implementing a NCM model. Although the goals of NCM include both reducing costs and maintaining or enhancing quality, the latter objective is often overshadowed by the emphasis on financial incentives. Perhaps one, if not the most significant implication for nurses that NCM offers is the opportunity to have a strengthened voice in how quality care will be delivered to achieve positive outcomes.

We have moved from the "Era of Cost Containment" into the "Era of Assessment and Accountability" (Gruber Wood et al., 1992) and as a result of this shift in orientation, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has emerged as the healthcare industry's professional accrediting body to ensure that quality patient care is not sacrificed in the quest to reduce costs. Another shift which has occurred is in how quality is assessed. Quality Assurance has evolved from problem identification and

resoltion to a broader version of Continuous Quality Improvement that examines how well the processes are coordinated and integrated along with how the processes can be improved (Gruber Wood, et al., 1989).

Clinical Implications

The tools and concepts of NCM, which have been described in this paper, clearly provide an excellent means of addressing these issues. But the real heart of the NCM system is clinician directed practice. By positioning the nurse clinician at the center of the care management process, the focus of patient care shifts from tasks to outcomes. Unfortunately the often literal, task-oriented interpretation of systems like nursing acuity have done little to enhance nursing's professional image internally. As a result, many non-nurses do not understand that when length of stay is shortened, as in systems like NCM, the intensity of the nursing process increases since the same outcomes must be achieved in less time (Zander, 1988). Convincing the hospital administrative hierarchy to commit the necessary resources to effectively support a NCM system can be a true challenge to the NCM. But by directing

the appropriate utilization of resources, ensuring that standards of care are maintained and outcomes are met to assure patient discharge within established length of stay parameters, the NCM can demonstrate professional accountability and present an effective case for the benefits of the NCM system.

The complexity of the NCM's role makes the clinical nurse specialist (CNS) uniquely qualified to fulfill the role and ensure its success. The CNS who has advanced expertise in pathophysiology, human responses to both actual and potential illness, health care resources and other elements impinging on care is best prepared to coordinate and direct care as a case manager (Gaedeke Norris & Hill, 1991). The CNS has the clinical expertise to identify specific patients and diagnostic groups most likely to benefit from managed care. The CNS's astute assessment skills facilitate appropriate selection of patients who are at risk for complications which can take additional costly resources and result in outcome problems.

When managed care is employed as a clinical system, deviations from critical paths and expected

outcomes are quickly noted and interventions can be appropriately targeted at the source of the problem. Immediate corrective actions are augmented through the review of variances and identification of trends which enable the NCM to implement planning on a larger scale to improve care for all patients within a specific case type. Of equal importance to the identification and correction of negative variances is the evaluation of positive variances. Such evaluations can help identify which interventions facilitated the achievement of outcomes earlier than anticipated. The NCM can use this information to incorporate appropriate changes to promote more cost effective care.

In addition to monitoring deviations from critical pathways, as was previously described, conducting reviews to evaluate the effectiveness of ancillary and community resources in promoting independence and self-care abilities of the patient and/or family is indicated. In one study of quality in nursing case management, the majority of case records indicated that the case manager had effectively arranged for appropriate care and more than half of the records

showed an enhancement in quality of life that could be attributed to case management interventions (Collard, Bergman & Henderson, 1990).

Consultant Implications

Another role with important implications for nursing is the role of the NCM as a consultant. As an informational expert in case management, the NCM can provide resources to assist multidisciplinary team members in making practice decisions necessary to formulate critical pathways. The NCM may also provide consultation to primary caregivers when patients are at variance with critical pathways; helping the staff to problem-solve and devise new strategies to assist patients in achieving goals. The consulting role of the NCM is complemented by the NCM's ability to collaborate. The establishment of collaborative practice patterns has been shown to minimize duplication of effort and unnecessary conflict, thereby enhancing the quality of patient care. Increased patient satisfaction and improved job satisfaction for both physicians and nurses are additional benefits to be derived from collaboration (Fagin, 1992). Despite

the benefits of collaboration, there are barriers to its achievement. Clearly one such barrier, both real and perceived, is education. The advanced education of the CNS along with expert technical skills and competence in communication can help to achieve parity between the two disciplines which will aid in overcoming these barriers.

Educational Implications

Through the use of the case management plan and the critical pathway, the NCM model enhances quality in the care delivery process by facilitating the transfer of specialized knowledge of expert clinical staff to novice staff (Del Togno Armanasco, et al., 1989). For decades the nursing care plan has been the mechanism through which nurses have attempted to transfer specialized nursing oriented expertise (Ibid). However, this method has generally failed to achieve positive results. Many nurses perceive that there is not adequate time to develop a meaningful plan of care, therefore the care plan is often completed in a superficial manner. As a result, the care plan does not provide the expert knowledge required by the novice

practitioner. A further limitation is that the scope of the care plan focuses on "nursing" care rather than "patient" care, thus coordination with other disciplines is not promoted. The case management plan was designed to overcome some of the inherent limitations of the nursing care plan.

Although many nurses may embrace the new design tools and concepts presented within a NCM model, the changing roles and responsibilities associated with the transition to a new system may also result in stress. The blurring of authority that accompanies the role change can create anxiety, stress and role confusion among the nursing staff (Flynn, 1991). For this reason, the educational development and preparation of all staff to be involved in case management is vital to smooth role transitioning.

A comprehensive basic curricula, developed by the NCM, including: the rationale and overview of case management concepts; application of advanced nursing process; specific knowledge related to case types and systems and collaboration and team building can help prepare nurses to integrate management skills with

their everyday work.

The NCM plays a key role in educating and supporting patients throughout their hospitalization and often as a community resource. Patients experience a sense of security from having a familiar individual, the NCM, available on a consistent basis. Increased patient compliance with medical regimens has also been demonstrated.

The NCM must also be involved in the educational preparation of other healthcare providers. Effective case management requires the utilization and cooperation of a multidisciplinary health team to achieve its objectives. Collaboration and coordination among healthcare team members are cornerstones of the managed care process.

Case management is easier to teach when the institution, as reflected by the attitudes of the staff, is predisposed to change. NCMs must possess a keen understanding of their role within the multidisciplinary team and how interdependent autonomy and shared leadership can facilitate professional and organizational goals (Flynn, 1991). By appropriately

introducing the concept of case management to members of the multidisciplinary team, interpreting the purpose of the model and providing direction to the team members, the NCM can foster cooperation and create an atmosphere conducive to positive change.

Research Implications

The ability of case management to effect positive patient outcomes and improve the quality of patient care has many implications for nursing research. Perhaps the most important and compelling questions to be answered by future nursing research activities are the evaluation of NCM models to determine which models are most effective for which categories of patients and in which settings. Research studies have contrasted the managed care approach to existing systems of care, but comparisons of different managed care approaches within the same population are lacking. Although the literature overwhelmingly supports the cost-effectiveness of most NCM programs, particularly those in the acute care setting, little data is provided regarding rates of recidivism and/or complications related to early discharge from hospitalization. As a

nurse researcher, the NCM can access and analyze quality improvement and utilization review data to evaluate and address such potential problem areas.

Evaluating the effectiveness of care processes through the analysis of positive and negative variances will also lead to research questions. When outcomes are not achieved in accordance with guidelines outlined by critical pathways, questions concerning performance issues and patient factors should be addressed. If variance analysis reveals that care was delivered in accordance with set standards and outcomes were still not achieved within expected timeframes, research questions should be suggested. Studies testing different approaches to similar patient needs or populations may be indicated. Patient factors should be examined to determine if there are different methods or better means to care for different patients within the same general category. Data compiled from such research may serve to redefine DRGs for the future and/or develop new methods of categorizing patients within the case management model.

Patient compliance is another factor with

potential research implications. The increased compliance with medical regimens demonstrated by NCM models has been attributed to a sentinel effect which improves behavior as a result of the patients being watched and attended to (McKenzie, et al., 1989). The use of patient critical pathways to complement clinical critical pathways have been shown to help alleviate patient anxiety and motivate patients to participate in goal achievement (Mosher, Cronk, Kidd, McCormick, Stockton & Sulla, 1992). Perhaps the sense of empowerment patients feel by being more involved with their care is a factor to be examined in future research.

Administrative Implications

Perhaps the one area in which the NCM can be most instrumental is in eliciting the support and committment of organizational leadership to pursue the case management approach. Acting in an administrative role, the NCM can present a compelling argument to top levels of administration by demonstrating how the case-oriented approach can achieve optimization of costs for the entire organization as well as enhance patient and

nurse satisfaction and interdisciplinary collaboration. The nurse's integral role within the healthcare team and constant contact with the patient places the nurse in a strategic position to improve quality patient outcomes and potentially increase market share for the hospital.

The NCM has a unique opportunity to gain power for nursing by demonstrating that in addition to being caring, nurses can also be efficient, productive and competitive. Instead of viewing a cost-conscious approach as a threat, nurses should align themselves with administrators and become more involved in the development and monitoring of the care delivery process to promote the interests of nursing and to enable nurses to expand their professional horizons.

Chapter Summary

This chapter discussed the implications the nursing case management model has for nursing. The CNS and the various dimensions of the CNS role including implications for: clinical; consultant; educational; research and administrative roles were explored.

Potential research questions and implications for future research were also addressed.

Summary

This paper examines the nursing case management model of patient care delivery and the various economic and social factors that led to its emergence on the American healthcare scene. Two distinct models of nursing case management, as discussed in the literature, are presented and contrasted. The key components and distinguishing features of both models are presented. The relationship and utility of nursing theory to the nursing case management concept is also explored.

Strategies for developing a nursing case management program, utilizing considerations and recommendations identified in the literature, are examined. The role the clinical nurse specialist can assume in the development and implementation of a nursing case management system is discussed. Nursing implications relating to the clinical, consultant, educational, research and administrative dimensions of

the clinical nurse specialist role are presented as well. Potential research questions and implications for future research are included.

Conclusion

The focus on cost-containment will undoubtedly be directing administrative healthcare decisons well into the 21st century. Therefore it is essential that nurses develop a proactive position to respond to the challenges of a rapidly changing healthcare environment. Unless nursing can respond and transition from a task-oriented approach to one that is outcome-driven, nursing will become even more vulnerable to cost-cutting measures that may have devastating effects for their departments.

Nurses need to tap into their tremendous potential power within healthcare organizations and become active participants in the development and implementation of practice models that will support the needs of administrators and clinicians as well as patients. Managing patient care utilizing a multidisciplinary, collaborative approach for a specific patient case type

with a clinical nurse specialist as the case manager appears to be a viable way to enhance not only the delivery of care, but patient and care giver satisfaction as well. In addition, this model has been shown to result in significant cost savings.

Although a case management approach requires the involvement of many disciplines, its implementation does not have to be a grueling process. It does require the sustained commitment at every level of the organization to ensure its success. The patience and resources required to adapt to a new model of patient care delivery should not be overlooked nor be underestimated. The special skills of the clinical nurse specialist can facilitate the cultural change necessary to create and effectively implement an innovative system such as nursing case management. In this era of cost-containment, the ability to quantify the value of professional contributions, through cost savings to the organization, may be the key to fostering support and justifying an expanded role for nursing in organizational decision making.

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